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Uncorking a Strange Brew: The Need for More Competition in Ontario's Alcoholic Beverage Retailing System

The lack of competition in Ontario's alcoholic beverage retailing is causing higher prices and less choice for consumers as well as reduced government revenues. The province should create a more competitive retail market by allowing wine and beer sales in grocery and convenience stores as well as other retail outlets.

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THE STUDY IN BRIEF

The lack of competition in Ontario's system for alcoholic beverage retailing causes higher prices for consumers and foregone government revenue. A major component of the lack of competition is the disadvantage faced by small Ontario wineries and breweries relative to the larger producers. Three large brewers own The Beer Store, which dominates retailing of beer, while two large wineries enjoy the right to sell their wines in major off-winery stores: the Wine Shop and the Wine Rack.

We find that freeing up alcoholic beverage retailing would result in increased government revenue, lower prices, and more convenience. Other factors being equal, Western Canadian provinces with more competition had 7 percent more per capita provincial alcohol profits than provinces with government-run monopolies.

To compare Ontario's beer prices relative to those in Quebec, a province with considerably more retail competition, we collected data on prices of comparable domestic and international brands sold in both provinces. We find modest price differences for domestic beer brands, but much higher prices in Ontario for international brands relative to Quebec. We also find that retailing costs are lower in Ontario because The Beer Store enjoys significant economies of scale. These factors combined allow brewers to earn what we estimate to be \$450 to \$630 million in additional profits compared to what would have occurred in a competitive retail market similar to that in Quebec. Within Ontario, we find very high prices for restaurant customers relative to retail customers.

The wine industry in Ontario also has little retail competition. The LCBO and two chains of off-winery stores dominate sales. Other wineries have a hard time finding shelf space for their brands at the LCBO and (with a few exceptions) do not have access to off-winery stores. That slows their expansion and limits their economies of scale. Opening up wine retailing to free competition would reduce the advantage held by a few large producers and help create a healthier wine industry in Ontario.

We recommend that the Ontario government create a more competitive system for alcoholic beverage marketing through a gradual process of liberalization. In particular, it should:

- Allow sales of wine and beer in grocery and convenience stores, as in Quebec;
- Further open up beer retailing by licensing other retail outlets;
- Free up wine retailing by granting licences for off-winery stores to other wineries and also to new wine retailers.

These changes would increase the choices available and reduce prices for Ontario consumers, as well as improve the competitiveness of Ontario's smaller wineries and breweries and generate more revenue for the government.

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Ontario's system of alcoholic beverage retailing is a legacy of World War I and the heyday of the temperance movement in the 1920s. Unlike most jurisdictions in Canada and the United States, a provincially owned Crown corporation, the Liquor Control Board of Ontario (LCBO) almost exclusively retails wine and spirits. As for beer, three large companies – the result of consolidation of Canada's beer industry – operate The Beer Store (TBS), which does most of the retailing of beer.

As a result, Ontario consumers have restricted choice in where they can buy their alcoholic beverages, and they pay higher prices for them, as we find, than consumers in Quebec.

The limitations on alcohol retailing go beyond simply the clout of the LCBO and TBS, and are enmeshed in legal restrictions and grandfathered levels of protection negotiated at the time of the US-Canada Free Trade Agreement. We will use the term “quasi-monopoly” in what follows, but readers should realize that this is a short-hand for the restricted competition that results from the privileged position of the LCBO, TBS, and grandfathered off-winery stores.¹

The original rationale for government ownership – control over alcohol retailing to limit the amount consumed – is now outdated. The LCBO, far from discouraging alcohol sales, publishes brochures touting various wines, beers, and spirits. Its stores

are welcoming, and its wares are openly displayed – quite a change from earlier times.

While social issues associated with alcohol consumption remain an important concern, it appears that few in the province see the need to prohibit or strictly limit alcohol sales to adults. Issues of alcohol abuse and traffic accidents can be addressed by means such as adequate enforcement of laws preventing sales to minors or those evidently intoxicated, punishing drunk driving, and education programs accompanied by treatment of alcohol addiction.² Social issues are beyond the subject of this study, which is concerned with the economics of different models of alcoholic beverage retailing.

The Beer Store's quasi-monopoly of beer retailing is also an anachronism. What started as a marketing cooperative of small brewers to limit beer consumption has turned into a chain that three large brewing companies own. While The

The authors would like to thank several reviewers for helpful comments on an earlier draft and C.D. Howe Institute staff including Benjamin Dachis, Senior Policy Analyst. Professor Sen acknowledges previous consulting work done for the Ontario Convenience Store Association. Any remaining errors remain the responsibility of the authors.

1 The standard economic definition of monopoly is a situation in which a single company owns all or nearly all of the market for a given type of product or service, while a related term, oligopoly, is used to describe a market form in which a market or industry is dominated by a small number of sellers.

2 See, for instance, the National Alcohol Strategy report (NAS 2007).

Beer Store exerts no control over the prices that it charges, which individual brewers set, its position of quasi-monopoly limits the ability of smaller brewers to market their products themselves.³

The patchwork of regulations affecting wine sales also puts smaller Ontario wineries at a disadvantage. The US-Canada Free Trade Agreement, subsumed into NAFTA in 1993, grandfathered off-winery stores in Ontario owned by a few vineyards, but set a cap on their number. The intent was to prevent Ontario wineries from providing protection for local wines at the expense of foreign wines, which are carried only at LCBO stores. Most of the off-winery stores are now part of two chains. In contrast, the vast bulk of Ontario wineries can only sell in the province through the LCBO or at their winery.⁴

Many other provinces have moved away from monopoly distribution systems of alcoholic beverage retailing. In Quebec, grocery and convenience stores can sell beer and wine. British Columbia has recently approved the sale of liquor in grocery stores, starting in 2015. Alberta in 1993-1994 privatized alcoholic beverage retailing. No other province has entrusted beer sales to a quasi-monopoly owned by a few of the breweries themselves.

The Ontario government recently announced that it has set up a council to "optimize the full value" of various crown corporations, including the LCBO.⁵ This is too narrow a perspective, however, since the government and the people of Ontario would be better served by a more competitive system, even if this meant that the "value" of the LCBO – its ability to exploit its quasi-

monopoly of alcoholic beverage retailing – was not maximized. Were it to sell the LCBO, moreover, the government should not try to maximize the sales price by creating private monopolies with little competition, since this would undercut the benefits of reform. The experience of Alberta (where the government fully exited retail alcohol sales – but maintains a markup at the wholesale level and collects otherwise more revenue from alcohol sales) suggests that the government may be able to collect more revenue than currently through liberalization, even if the main policy goal is not to maximize government revenue.

The Need for Reform

Public dissatisfaction with the system led the Liberal government of Dalton McGuinty to convene a committee to study alcohol retailing, which recommended several steps that would open the sector to private competition and limit the role of the LCBO (Beverage Alcohol System Review 2005). However, the government did not act on the recommendations of the report. The reason for a lack of reform may be that there are many consumers, but alcohol is only a small part of their budgets so that they do not protest strongly. Those profiting from the status quo, in contrast, have a major stake in it, and strongly oppose reform.

We recommend that Ontario reform its system of alcoholic beverage retailing to allow sales of wine and beer in grocery and convenience stores, as in Quebec; further open up beer retailing by licensing other retail outlets; and license off-winery stores to all wine retailers.

3 See, for instance, http://www.blogto.com/eat_drink/2014/05/lcbo_bureaucracy_forces_craft_brewers_into_beer_store/.

4 Since May 1, 2014, wineries with an on-site retail store are also eligible to sell their VQA wine at farmers' markets. Wineries can also make internet sales.

5 See <http://news.ontario.ca/mof/en/2014/04/government-appoints-council-to-review-hydro-one-opg-and-the-lcbo.html>.

ONTARIO'S SYSTEM OF ALCOHOLIC BEVERAGE RETAILING

Who Does What

The production, importation, distribution and sale of alcohol in Ontario are regulated through the *Liquor Licence Act* and the *Liquor Control Act*. The Alcohol and Gaming Commission of Ontario (AGCO) administers the *Liquor Licence Act* and a limited number of sections of the *Liquor Control Act*. The LCBO administers the bulk of the *Liquor Control Act*, including the importation, warehousing and distribution of alcohol in Ontario. The production of alcohol is also subject to federal excise licence requirements under the *Excise Act* for the purpose of federal taxation.

The LCBO is a Crown corporation that operates retail stores selling beer, liquor, and wine to the public and to commercial establishments. The sale of beer to retail customers and commercial establishments is conducted in large part through The Beer Store (TBS). Apart from the limited on-brewery retail sales, TBS acts as a retail distribution network for all brewers – major and smaller craft establishments – and offers imported beer (purchased from the LCBO).

Both the LCBO and TBS generate significant revenues for the province. In 2012/13, the LCBO remitted a net profit of \$1.7 billion to the Ontario government, plus \$791 million to the federal and provincial governments in Harmonized Sales Tax, excise taxes and customs duties.⁶ Sales through TBS outlets generated roughly \$1 billion in revenue for the province through Ontario beer-specific taxes and sales taxes. (See Box 1 for more details on sales figures).

In addition to stores located at the wineries themselves, there are a limited number of off-winery stores that are allowed under NAFTA. However, these stores only sell the brands associated with the parent firm, and not the products of other domestic or foreign wineries. Both beer and wine can also be sold in retail outlets located directly at the breweries or vineyards in Ontario where they are manufactured. Distilleries can also make local sales, but this is not widespread.⁷

In what follows, we will concentrate on Ontario's markets for beer and wine, though spirits are an important component by value of alcoholic retail sales and government revenues. Expanding retail outlets for spirits raises greater health and safety concerns, given their high alcohol content; unlike beer and wine, spirits are not typically enjoyed with food nor give rise to alleged health benefits when consumed in moderation.

Ontario is the only jurisdiction in North America that limits off-site sales to a chain of government stores, a single private beer retailer, and a fixed number of off-winery wine stores. It limits entry into alcoholic beverage retailing, except for winery, brewery, or distillery stores – a very limited market.

Other Canadian provinces either concentrate retailing in the hands of government stores, or allow greater freedom for private retailers to enter the market. For instance, almost all retail alcohol (including beer, as well as wine and liquor) in New Brunswick, Prince Edward Island, Nova Scotia, Saskatchewan, and Manitoba is sold in government-run stores. However, of these provinces, Manitoba and Saskatchewan do allow the off-licence sale of beer (to take away) in licensed hotels, and in 2013, the government of

6 http://www.lcbo.com/aboutlcbo/media_centre/quick_facts.shtml.

7 Retail sale of alcohol through these channels outside of the LCBO is regulated by the Alcohol and Gaming Commission of Ontario (AGCO) and the LCBO.

Box 1: Ontario Alcohol Sales By the Numbers

- The breakdown of Ontario wine sales by volume in 2012 was as follows: LCBO imported wines 61.7 percent, LCBO Ontario wines 22.6 percent, wine retail stores 13.0 percent (Ontario wines only), other 2.6 percent (LCBO 2012).
- Shares of beer sales were as follows: TBS domestic beers 70.4 percent, LCBO domestic 13.5 percent, LCBO imported beers 9.0 percent, and TBS imported beers 7.1 percent.
- In value terms, total provincial sales of alcoholic beverages in 2012 broke down as follows: spirits 37 percent, wine 38 percent, beer 21 percent, and coolers 4 percent (LCBO, 2012).
- The LCBO operates 634 stores and 219 agency stores that are housed in grocery supermarkets or convenience stores – typically in communities that are too small to support regular LCBO stores.* The LCBO operates five warehouses that supply its stores across the province.
- TBS operates 448 Beer Store outlets across Ontario (TBS 2014). Beer is transported to these outlets from six warehouses across the province. There are 292 off-winery stores and 180 winery stores in the province (LCBO 2012).

* Convenience and grocery stores are allowed to sell alcohol in some rural areas in Ontario. But they are licensed by the LCBO and must follow LCBO regulations. Similarly, grocery stores are allowed to sell Ontario wine in a limited number of LCBO boutique stores throughout the province.

Saskatchewan announced that it would allow a limited number of privately held stores to sell alcohol.

Alberta privatized government-owned liquor retail stores in 1993-1994, and only privately owned stores currently sell alcohol. British Columbia began a different path towards privatization in 2002, allowing privately owned retail outlets to co-exist with government-owned stores. In Quebec, the *Société des alcools du Québec* (SAQ) is a Crown corporation, which mainly sells spirits and wines. Grocery and convenience stores and discount retailers such as Costco are allowed to sell beer and wine. In Newfoundland, stores belonging to the government-owned Newfoundland Liquor Corporation (NLC) sell beer, spirits, and wine, and convenience stores licensed by the NLC can sell beer.

No other province has granted quasi-monopoly retail rights to the private sector with respect to beer distribution. This is also true for the United States; while there are certain states with monopoly retail distribution, the ownership is with the government as opposed to the private sector.

Ontario's Market for Beer

Beer in Ontario is sold through three retail channels: the LCBO, the Beer Store, and on-brewery stores. The LCBO does not set prices for domestic beer, which are chosen by brewers, as long as they are consistent with minimum pricing regulations established by the *Liquor Control Act*. However, because the Ontario commodity beer tax is applicable only to beer manufactured in

Canada and all beers produced outside of Ontario are imported by the LCBO,⁸ the LCBO then sells those beers to TBS at a markup reflecting the Ontario beer tax.⁹

The Beer Store is owned by Brewers Retail, a joint venture between three Ontario brewing companies – Labatt Breweries of Canada, Molson Coors Canada, and Sleeman Breweries.¹⁰ The provincial government does not have an ownership stake in The Beer Store.¹¹ Apart from the LCBO and on-site stores maintained by breweries, no other stores are allowed to sell beer directly to the public.

Given the relatively limited selection of beer carried by the LCBO and the restrictions on direct-to-consumer selling by breweries, TBS has a near-monopoly of retail distribution in the province. Licensed brewers may sell their products through The Beer Store in return for a one-time listing fee, per-store fees, and continuing volume-based handling fees.¹²

The origins of the current retail structure arise from the Temperance Movement in Ontario. This movement ultimately led to the enactment of the *Canada Temperance Act* in 1864, allowing any county to forbid the sale of alcohol if supported by a majority of voters. The *War Measures Act* of 1918

resulted in provinces implementing restrictions on the sales of alcohol, which was consistent with public belief that temperance would create a better country for returning servicemen. However, Ontario had already implemented prohibition in 1916.

Prohibition was in effect in Ontario from 1916 until it was repealed in 1927. The Ontario government passed the *Liquor Control Act* in 1927, which still regulates alcohol access in the province. The Act created the LCBO and authorized the formation of the Brewers Warehousing Company Limited, which was a co-operative owned by many brewers. The co-operative allowed the brewers to pool warehousing and shipping. By the 1940s, the brewers purchased the retail stores that sold their beer, and the co-operative became known as “Brewer’s Retail Incorporated” and then The Beer Store of the present day. Over time, consolidations and acquisitions resulted in three firms owning The Beer Store.

Ontario’s Market for Wine

Domestic wine production is decentralized, with a few moderately large producers and many smaller wineries, leaving 76.5 percent of the market by value to imports (LCBO 2012, p. 121). Ontario’s

8 Note, however, that internationally branded beers, such as Sapporo, are often bottled domestically. We refer to international brands when The Beer Store refers to the brands as “imported.” We refer to beers as “domestic” when The Beer Store refers to them as produced in Canada.

9 See the Ontario Ministry of Finance website (<http://www.fin.gov.on.ca/en/tax/bwt>) summarizing relevant provisions of the *Ontario Alcohol and Gaming Regulation and Public Protection Act* (1996).

10 Specifically, the company is owned by the Labatt arm of Anheuser-Busch InBev, Molson Coors Brewing Company, and Sleeman Breweries, which in turn is owned by Sapporo Breweries Limited.

11 However, Flavelle (2008) refers to an independent survey, which finds that 6 out of 10 people think The Beer Store is a government entity similar to the Liquor Control Board of Ontario. A survey conducted by Angus Reid on behalf of the Ontario Convenience Store Association (OCSA) suggests that only 13 percent of people surveyed knew that The Beer Store is owned by three multinational companies (by Brenda Bouw, published in *Insight*, Fri., 20 Dec., 2013, and available at <http://ca.finance.yahoo.com/blogs/insight/two-thirds-canadians-want-beer-sold-convenience-stores-164754732.html>).

12 See Jeff Newton, president of Canada’s National Brewers, cited on the amount of these fees in: http://www.blogto.com/eat_drink/2014/05/lcbo_bureaucracy_forces_craft_brewers_into_beer_store/.

wines include both VQA (Vintners' Quality Alliance) wines, which are made with 100 percent Canadian grapes, and International Canadian Blends (ICB), which may contain as little as 25 percent Canadian grape juice, the rest from imported grapes. In 2011, ICB wines accounted for 73 percent of Ontario sales of Canadian wines by volume, and VQA wines 27 percent (Morris 2013). This implies that Ontario's premier product VQA wines, make up only about 6 percent of wine purchases in the province.¹³

Wine retailing is dominated by the LCBO, though winery stores and (more significantly) off-winery stores operated by the largest Ontario vintners also make a substantial fraction of wine sales in Ontario. However, these outlets are subject to LCBO regulations and cannot, for instance, undercut the prices charged for their wines at LCBO stores.

At present, the two largest Canadian (and Ontario) winemakers are Vincor Canada (which was taken over by Constellation Brands in 2006) and Andrew Peller Limited (which owns several wineries in Niagara and in British Columbia, and has operations in Nova Scotia). The bulk of the off-winery stores are operated by these two companies: Constellation Brands operates over 160 retail Wine Rack stores and Andrew Peller Ltd. operates roughly 100 Wine Shop outlets. Existing off-winery stores were grandfathered in the 1987 Free Trade Agreement with the United States: they were allowed to continue wine retailing, although new winemaking operations are only able to sell wine on their own premises or through the LCBO.¹⁴

Constellation Brands reported net Canadian sales of US\$434 million in 2013, while Peller's overall net sales were \$289 million in that year.¹⁵ In comparison, the remaining wineries in Ontario – of which there were roughly 130 at end-2013 – are small. According to Statistics Canada, total wine sales in Canada for that year totalled \$2.1 billion, of which Canadian produced wines accounted for \$689 million. The figures quoted above suggest that Vincor Canada and Peller constitute the bulk of the latter.

PROBLEMS WITH THE CURRENT SYSTEM

The current system suffers from various inefficiencies and disadvantages for purchasers of alcoholic beverages. The quasi-monopoly enjoyed by the LCBO and TBS imposes excessive costs on consumers, restricts their menu of choices, and limits the accessibility of stores retailing alcohol. In addition, it imposes distortions on small domestic breweries and wineries and puts them at a competitive disadvantage relative to a few large Canadian and foreign producers.

Lack of Competition and the LCBO

The monopoly position of the LCBO has allowed it to operate differently from firms operating in a competitive market environment. In particular, it does not have the same incentive to control costs. Many LCBO retail outlets are "megastores" stocking thousands of products in well-designed and comfortable outlets, with knowledgeable staff.

13 Calculated as $0.27 \times (1 - 0.765) = 6.35\%$.

14 The relevant paragraph of the Canada-US Free Trade Agreement is Article 804, para. 2 (these provisions were carried over to 312.2 section A of NAFTA), which limits the extent of protection provided to private (off-winery) wine stores to that in effect in October 1987.

15 Peller's sales figures include exports (but these were small), and both companies' sales include other alcoholic products in addition to wine (but the latter was the largest proportion). Constellation's Canadian sales also include purely foreign wines.

The LCBO exhibits high costs that are unlikely to be reduced in the current quasi-monopoly setting. A comparison of the most recent annual reports for the LCBO (LCBO 2012) and Liquor Stores N.A. Ltd. (LIQ 2013) is informative. Liquor Stores N.A. Ltd. is a private operator of alcoholic beverage retail stores in Alberta, British Columbia, Kentucky, and Alaska. It is much smaller than the LCBO, having 2013 sales of \$661 million compared to the LCBO's 2012 sales of \$4.8 billion. Since it must compete with other retailers, its gross margin is markedly lower – 25.2 percent versus the LCBO's 49.8 percent. Unlike the LCBO, it cannot add on a government-mandated mark-up that it remits as a dividend to the province. Employee salaries and benefits for the LCBO were \$410 million in 2012 – an average of \$67,500 for each of the LCBO's 6,067 employees, and 17.5 percent of the cost of sales. In contrast, for Liquor Stores N.A. Ltd. wages and employee benefits were only 11.2 percent of its cost of sales in 2013.

The Beer Store's Additional Profits

As is the case with the LCBO, TBS allows the major brewers in Ontario to reap economies of scale by pooling warehousing and transport resources – which indeed was the original objective of forming the brewer's co-operative. The control of the upstream and downstream infrastructure allows major brewers to ensure that supply seamlessly meets retail demand, and unsold inventory costs are minimized, resulting in lower warehousing costs per litre of alcohol sold.¹⁶

Once the retail infrastructure (i.e., TBS outlets) has been established, average and marginal costs

drop with increases in output. Thus, retail delivery becomes cheaper (per unit of output), as sales or throughput increases for a given infrastructure of retail outlets. This model has many of the features of a natural monopoly, in which the firm is required to expend considerable upfront resources – usually on infrastructure – initially experiencing very high average and marginal costs of doing business that decline with increasing sales (Sen 2013c). While these economies of scale would permit TBS to lower the prices to consumers, it has limited incentives to do so, given its quasi-monopoly over Ontario beer sales.

In Quebec, retail delivery is quite different, being done through hundreds of grocery and convenience stores, and retail discounters such as Costco. The beer industry bears the costs of servicing these stores. Hence, it is reasonable to assume a conventional upward sloping marginal cost curve for the Quebec beer industry. The presumed presence of economies of scale would considerably enhance the profits earned by brewers in Ontario – at least the owners of TBS – relative to those in Quebec.

The absence of competition in Ontario manifests itself not only through higher prices but also poorer service. At most stores, Beer Store outlets do not display all their products for customer evaluation or information, but instead offer a list of beers, from which consumers may choose items to purchase that are then rolled out from the attached warehouse. The major brewers that own TBS have a reduced incentive to advertise competing brands – such as those sold by craft brewers – or to offer them significant shelf space (Mysicka and McKendry 2013).

16 For a good overview of TBS business model please see the recent blog post "Understanding The Beer Store," by Jordan St. John available at <http://saintjohnswort.ca/>. Related concepts of cost efficiencies are also discussed in TBS (2014), specifically on pages 24-25.

Ontario's Retail System Facilitates Higher Prices Charged by Brewers

The market demand for beer and the structure of TBS itself suggest that the TBS quasi-monopoly allows major brewers to maintain higher prices rather than compete aggressively. The ability to do so depends on three factors: i) a low market elasticity of demand, ii) few significant participating firms, and iii) barriers to entry (Church and Ware 2000).

These three factors seem to characterize the Ontario retail beer market. First, the brands offered by major brewers enjoy considerable recognition and consumers have a strong preference for them, relative to craft beers, so that elasticity of demand for the major brands may not be very high. Second, The Beer Store is owned by only three firms. Third, there are considerable barriers to entry by new breweries, given the expenditures and time required to build brand recognition and consumer loyalty, as well as the fact that a new firm's retail products will ultimately have to be sold through The Beer Store or the LCBO.

The LCBO's practice not of selling beer in 24-bottle cases has allowed brewers to implement price discrimination with respect to commercial establishments. For the sake of efficiency, commercial establishments must purchase beer in large quantities – specifically, in kegs or 24-bottle packs. However, commercial establishments are not permitted to purchase beer at prices available to final retail consumers. The brewers publish a separate price list for commercial establishments. If commercial establishments do not purchase beer

under their establishment licence, their licence to serve alcohol may be suspended by AGCO.¹⁷ There is little mitigating competition, given the LCBO's decision not to offer beer in large pack sizes.

This policy has significant implications for the public who purchase beer from bars, taverns, and restaurants, and for the profitability of those retail outlets. According to TBS (2013) data, roughly 18-20 percent of all sales are through such licensees. Comparing prices for commercial establishments and retail consumers shows that the former pay considerably more (Table 1).

The prices paid by commercial establishments for popular 24-bottle packs are \$5 to \$11 higher than prices paid by retail consumers – a price difference of as much as 24 percent. There are several possible explanations for such differential pricing across customers. One explanation is that the costs of servicing commercial establishments are higher. Another possibility is that the market power of major brewers allows them to price discriminate between different customers, depending on the price elasticity of demand. Commercial establishments may be more price inelastic in demand, as their customers may have strong demand for popular brands. If they do not, they risk losing clientele and business to other establishments carrying such products. In both cases, it is the absence of alternative sources of supply that allows TBS to enforce its differential pricing.

To provide some evidence to distinguish between these hypotheses, we collected data on prices charged by a variety of craft brewers. The data are for 24-bottle packs that they sell through

17 The AGCO states "Licensees are required by law to purchase liquor for sale and service at their licensed establishment only from a "government store." Liquor not bought from a government store (i.e., LCBO, Brewers Retail Inc. or an AGCO authorized winery, distillery or brewery retail store) is considered illegal liquor. Licensees should ensure that all liquor on your premises has been legally purchased under your establishment's licence." See http://www.agco.on.ca/pdfs/en/tip_sheets/3055.pdf.

Table 1: Differences in Popular Beer Prices for Commercial Establishments and Retail Consumers (includes HST & Deposit Fee)

	Molson Canadian	Coors Light	Budweiser	Bud Light	Rickards Red	Corona (Extra & Light)	Heineken	Stella
<i>Prices for 24 domestic brand bottle (341 ml) and international brand bottle (330 ml) packs</i>								
Beer Store Advertised Price for Commercial Establishments	\$44.75	\$44.75	\$45.75	\$45.75	\$45.13	\$53.66	\$54.87	\$55.87
Beer Store Advertised Price for Direct Retail Consumers	\$34.95	\$33.95 (on sale, regular \$34.95)	\$34.95	\$34.95	\$39.95	\$44.95	\$46.95	\$46.95
Difference	\$9.80	\$10.80	\$10.80	\$10.80	\$5.18	\$8.71	\$7.92	\$8.92

Source: The data for prices charged to commercial establishments were downloaded from <http://www.thebeerstore.ca/sites/default/files/Weekly%20Pricing/Licensee/Newlicensee%20Mar03%202014%20Licensee%20prices.pdf> and direct retail prices were also downloaded on March 2nd, 2014, from the TBS website.

The Beer Store. As can be seen from Table 2, there are very limited differences for these products in terms of prices charged to direct retail customers and commercial establishments. These findings support the contention that price differences in products are a result of the market power of major brewers. While differences in costs may affect prices, arguably, smaller brewers should also experience some of these costs, which then should result in some differences in prices charged to retail consumers and commercial establishments. Restaurants Canada (formerly The Canadian Restaurant and Food Association) estimates that its members experience about \$75 million in incremental costs as a result of the prices charged

by major brewers relative to those paid by retail customers.¹⁸

Lack of Competition in Wine Retailing and NAFTA Rules Constrain Smaller Wineries

It is paradoxical that the provisions of NAFTA, which allowed for the maintenance of existing discrimination in Ontario and BC in favour of local wines, and the quasi-monopoly of the LCBO, disadvantage most Ontario wineries relative to foreign wines and international blends. Constellation Brands' takeover of Vincor gave it ownership of 160 private wine-store outlets, grandfathered in the 1987 Free Trade Agreement.

¹⁸ See <https://www.restaurantscanada.org/en/issues/article/brewery-gouging-costs-ontarians-75-million-a-year-2928>.

Table 2: Differences in Craft Beer Prices for Commercial Establishments and Retail Consumers (Includes HST & Deposit Fee)

	Steam Whistle Pilsner	Mill Street, Belgian Wit, Stock Ale, Tankhouse Ale	Mill Street Original Organic Lager	Amsterdam Kawartha Lakes Cream Ale, Kawartha Lakes Pale Ale & Kawartha Nut Brown	Amsterdam Downtown Brown	Muskoka Cream Ale, Craft Lager(355 ml)
	<i>Prices for 24-bottle (341 ml) packs</i>					
Beer Store Advertised Price for Commercial Establishments	\$49.45	\$43.95	\$45.95	\$38.95	\$35.95	\$45.50
Beer Store Advertised Price for Direct Retail Consumers	\$45.95	\$43.95	\$45.95	\$38.95	\$40.95	\$45.50
Difference	\$5	0	0	0	-\$5	0

Source: The data for prices charged to commercial establishments were downloaded from <http://www.thebeerstore.ca/sites/default/files/Weekly%20Pricing/Licensee/Newlicensee%20Mar03%202014%20Licensee%20prices.pdf> and direct retail prices were also downloaded on March 2nd 2014 from the TBS website.

It also owns vineyards in Argentina, Chile, and Italy as well as the United States, providing a ready source of unfermented grape juice for blends with Ontario grape juice.

The limitation on new stores and the restriction that off-winery stores sell only their own products introduce a positive feedback loop that rewards size: the more brands a store has to sell, the more valuable is ownership of the store. Thus, Constellation Brands can sell its foreign-content wines, as does Peller, not just its wines made

exclusively from Ontario grapes. In addition, to the extent that they own several Ontario wineries, they can sell all their wines at each off-winery store. This feature makes takeovers of existing wineries attractive, since they increase the number of stores (either at the winery or off-winery) at which all the company's wines can be sold. The announcement¹⁹ by Magnotta Wines that it was taking over a rival winery, Kittling Ridge, emphasized that it would double the number of Magnotta retail stores.

19 "Opening new retail locations in Ontario's regulated wine industry is only possible through the acquisition of existing licences. This purchase allows us to add new stores to our chain and build on our over 20-year retail success while evolving the Kittling Ridge brand." <http://www.newswire.ca/en/story/1109447/magnotta-buys-kittling-ridge-wine-business>.

Other wineries have protested this uneven playing field, but it is hard to see how it could be leveled without opening up wine marketing to free competition. For instance, a proposal to improve the marketing of purely Canadian (VQA) wines, if implemented, would reportedly be challenged under the terms of the NAFTA agreement by California winegrowers.²⁰ Thus, the strictures of the free trade agreement now have the perverse effect of limiting the competitiveness of many of the wines made from Ontario grapes in the domestic market, despite the provisions of the agreement that were meant to grandfather a measure of protection for them.

The Ontario wine industry, though it is a major employer and revenue producer in the province, is facing important challenges from other producing countries. Marked quality improvements in other countries and the globalization of the wine trade are major factors limiting the outlook for domestic wineries. Canadian wine sales in the Ontario market (including both sales at LCBO stores and at winery and off-winery stores) experienced a decline up to the 1990s, but a flattening since, in both value and volume shares, while the average price of Canadian wines relative to that of imports has fluctuated around a fairly constant level of 80 percent (Figure 1).²¹ Despite a well-recognized improvement in the quality of Ontario (and Canadian) wines and despite the ability of some Ontario producers to sell directly to customers, Ontario wines, in aggregate, have not been able to recapture market share or increase the relative price paid for Canadian wines.

An indication of the global importance of a country's wine industry, scaled by the country's size, is the proportion of a country's wine production that is exported. A measure of whether a country has the climate, technology or resources to profit from the production of a particular good on world markets is its "revealed comparative advantage," defined as the share of a country's exports of the good to its total exports, divided by the global export share of that good. A value in excess of one indicates a comparative advantage, a value less than one a comparative disadvantage (thus the average across all products is exactly unity).

By this measure, Canadian wines have not fared well in international markets. We calculate that the share of Canadian wine in Canada's total exports is only about 0.0075 percent, compared to a world share of wine exports of 0.17 percent – yielding a revealed comparative advantage of only 0.045, which is far below the critical value of one.²² Except for icewine, Canada's wine production has a very limited impact on world markets.

One of the challenges facing smaller Ontario wineries may be the lack of economies of scale in production and marketing. In addition to challenges posed by climate, and the relatively small amount of potential agricultural land in Canada for wine-producing grapes, the regulatory environment also impedes the expansion of Canada's wine industry. An Ontario government publication entitled "Starting a Winery in Ontario" lists 11 government agencies governing the wine industry (Ontario 2003). Among them, the LCBO needs to test the

20 See <http://winesinniagara.com/2011/07/california-wants-to-take-on-the-ontario-wine-industry-what-a-pile-of-hooey/>.

21 The LCBO does not split out Ontario wine sales from the total for Canadian wines. However, Ontario constitutes 71 percent of Canadian production, and no doubt a higher percentage of the LCBO's Canadian wine sales.

22 While it is difficult to get exactly comparable data, since the UN Comtrade statistics do not identify wine as a separate commodity, we combine data from Statistics Canada for exports of grape wine and estimates by Rome's *Istituto di Servizi per il Mercato Agricolo e Alimentare* of the value of world wine exports. For more details, see <http://www.bloomberg.com/news/2012-04-24/world-wine-trade-increases-11-on-chinese-demand-ismea-says.html>.

Figure 1: Canadian Wine's Share of Total Wine Sales in Ontario



Sources: LCBO annual reports and authors' calculations.

wine, approve product labels, and agree to a selling price, and AGCO needs to grant a liquor licence and authorize the opening of a wine retail store. Each of these steps is time consuming and requires the payment of various fees.

The larger producers can spread these fixed costs over greater volumes of wine, and some of them also have access to the scale advantages that result from being able to sell all their brands at off-winery stores. Despite Ontario government initiatives to

help them, smaller wineries face greater difficulties than the two large producers, and this limits their ability to exploit economies of scale and to produce and sell VQA wines in quantity.

Retail liberalization, along with a lowering of regulatory, licensing, and other market access costs, could help them achieve greater scale. Equal access for all wineries – whether based in Ontario, elsewhere in Canada or abroad – would encourage greater competition. This would allow consumers to

select the kinds of wine they prefer across a range of attributes, such as price, quality, and the place where the wine was produced. The existing retail system limits consumer choice and the opportunities open to many Ontario wineries to expand. Gearing Ontario's wine retailing policy towards expanding competition could encourage Ontario wineries to innovate and differentiate themselves from other producers, both domestic and international.

REFORM OPTIONS AND THEIR IMPLICATIONS

Potential reforms in alcoholic beverage marketing need to address the problems with the current system that were raised in the previous section: limited choice and high prices faced by consumers, government-sanctioned competitive advantage favouring larger wineries and breweries, and inefficiencies resulting from quasi-monopoly. The key to addressing these problems is increasing the degree of effective competition, which could (i) limit the quasi-monopoly rents that accrue to the LCBO and The Beer Store, (ii) lower prices paid by consumers, and (iii) potentially increase the amount of taxes the government could levy on the sector. Opening up access to retail outlets to all firms would help to level the playing field for wineries and breweries.

The 2005 Ontario Beverage Alcohol System Review (BASR) panel judged that the current system was inefficient and that reform of the system was needed to provide more benefits to the citizens of Ontario (BASR 2005). It pointed to the potential for greater public revenue from a privatized system, and greater access to retail outlets for Ontario's wineries. It recommended that the

province move away from a control system to one in which alcohol sales, both wholesale and retail, are licensed to the private sector. Licences would allow marketing of beer, wine, and spirits on an equal basis, but would be restricted to a particular geographic area in the case of retail and limited to a total of 10 wholesalers for the province. The report recommended auctioning off existing LCBO stores; existing off-winery and Beer Store outlets would be offered the choice between selling their stores or renewing their licences for a period of 10 years. For a transition period, the LCBO could continue to have a monopoly in wholesaling of alcoholic beverages. As noted above, the Ontario government has not acted upon the report's recommendations.

It is important to recognize that privatization in itself is not sufficient to create greater competition. The BASR panel's recommendation would have transferred some of the LCBO's monopoly rents to the private sector if single licences were granted to sizeable geographic areas. The panel's report did not seriously study how to tailor the number of licences to the requirements of increased competition.

In sum, it seems important to allow free entry (or at least, not very constrained entry) for effective competition to occur, even if this means an increase in retail outlets, contrary to the BASR report's position.²³ Effective competition requires a liberal licensing system.

CRITICS OF REFORM

Defenders of the status quo have put forward two main arguments that we will address. They claim that privatization and increased competition would lead to lower government revenue and/or raise prices. We review the merits of their arguments, and

23 The BASR recommendations seem to be guided by an implicit rule that reform should not increase the number of outlets for alcoholic beverages, just transfer them to the private sector – perhaps in order to deflect any criticisms based on public health concerns.

then provide some fresh statistical evidence that contradicts these contentions.

A. Claim: Lower Government Revenue

A recent position paper issued by The Beer Store (TBS 2014) asserts that complete privatization in Alberta and partial retail privatization in British Columbia have resulted in lower government revenues. A foreword written for the TBS study states: "For example, it is not possible to have lower product prices and maintain or enhance government revenue. The one is directly related to the other. Therefore, for prices to fall public revenues must decrease. If public revenues are to be maintained over time then prices must rise." This reasoning misses the obvious point that lower prices can increase sales, which other things equal increases revenues. The net effect on revenues depends on the elasticity of demand.

Furthermore, regarding alcohol pricing more generally, competition should yield an incentive for the LCBO to reduce some of its inefficiencies and lower overheads, resulting in higher dividends to the province without an increase in prices. The BASR report (BASR 2005) suggests that privatization would significantly increase government revenue. In a similar vein, Milke (2012) argues that Alberta has maintained significant government revenue in a completely privatized retail market through markups on wholesale prices.²⁴

The Evidence

To investigate the effects of deregulation on government revenue, we used data on net income reported from 1993–2011 by the liquor authorities and provincial governments of Alberta, British Columbia, Saskatchewan, and Manitoba that are available from CANSIM Table 183-0017.²⁵ These are the profits earned by liquor authorities and transferred to provincial governments independently of commodity and sales tax revenue.²⁶ To be clear, we are not including revenues from liquor-specific taxes or the provincial sales tax; these apply whether retailing is done by the privately owned or government stores, and hence are not relevant to a comparison between them.

The objective of our exercise is to assess whether there are significant differences in per capita profits earned in provinces where retail delivery is either somewhat or completely deregulated, relative to provinces with more regulation. Our sample includes provinces that do not allow the private retail sale of alcohol (Saskatchewan and Manitoba²⁷); a province that over the sample period moved from a system of exclusive government retailing to a hybrid public-private model (British Columbia); and a province that permitted the private sale of alcohol (Alberta) over the whole sample period.²⁸ We cannot use data from Quebec and Ontario, as Statistics Canada financial statistics for liquor authorities do not reflect beer sales

24 For example, despite having privatized the retail distribution system, the Alberta government is still able to impose a substantial markup on the wholesale price of alcohol sold in the province. For details, see http://www.aglc.gov.ab.ca/pdf/quickfacts/markup_rates_schedule.pdf.

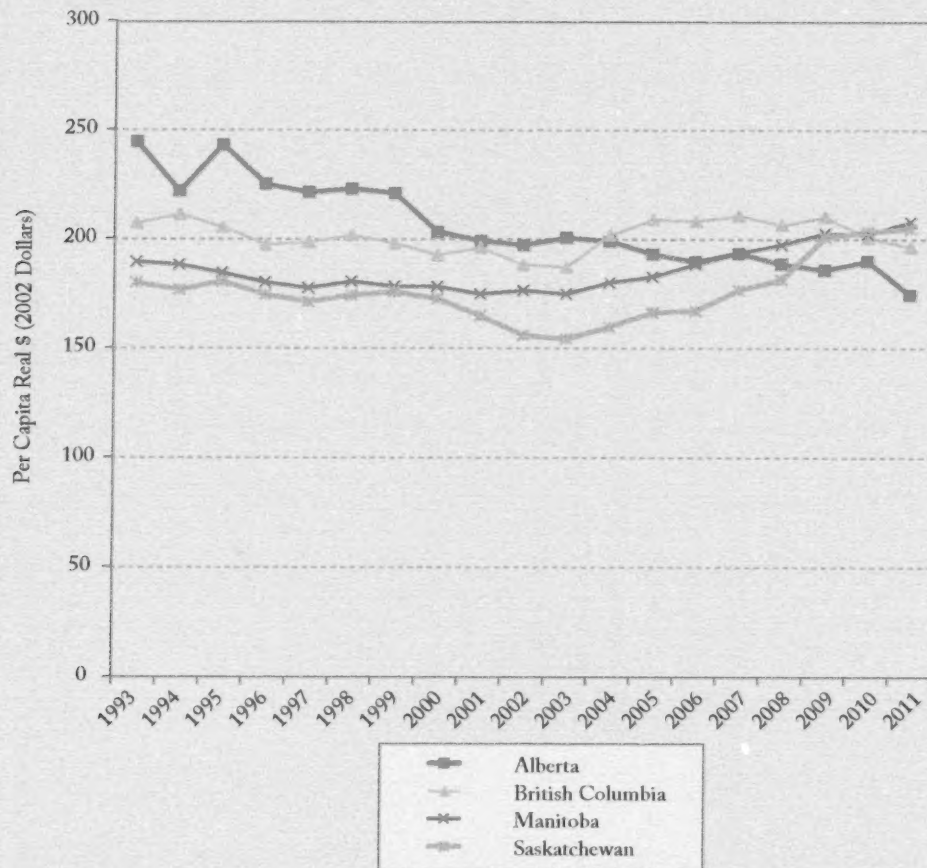
25 Much of this section is taken from Sen (2013a).

26 Net income = Gross sales (including GST) – Goods and Services Tax (GST) – cost of goods sold – administrative and general expenses less miscellaneous income.

27 Manitoba in 2011 introduced a pilot project to open five Liquor Mart Express stores in grocery stores, but these are to be run by the Manitoba Liquor Control Commission. See <http://winnipeg.ctvnews.ca/mlcc-to-open-first-liquor-mart-in-grocery-store-1.805489>.

28 Saskatchewan decided to allow private alcohol retailing in 2013, which is outside of our sample.

Figure 2: Per Capita Net Income (Profit) of Liquor Control Authorities



Source: Statistics Canada, CANSIM data.

through grocery, superstores, and convenience stores in Quebec, and The Beer Store in Ontario. Statistics Canada data on income and revenue for liquor authorities for Alberta, British Columbia, Saskatchewan, and Manitoba include all types of

alcohol. Restricting the sample to the Western provinces ensures greater homogeneity.

Figure 2 presents trends in per capita net income or profits (real dollars) over time for the four provinces.²⁹ For most years, per capita net incomes

²⁹ These per capita figures were calculated by taking gross and net income, and dividing it by the province specific consumer price index and by population aged 15 and over. Population was obtained from CANSIM table 282-0002 and consumer price index from CANSIM Table 326-0021.

generated by liquor authorities were higher in Alberta and British Columbia – where sales were fully or partially privatized – than in Saskatchewan and Manitoba, where they were not.

It is true that each province has its own (often complicated) formulas to calculate markups for the various types of alcoholic beverages, and these help to determine profits.³⁰ In addition, it is difficult to assess the overall effects of retail deregulation based on simple graphical analysis, because other factors come into play – such as the higher personal incomes in Alberta and BC.

Econometric estimates based on a multivariate regression model that controls for such confounding factors suggest, however, that alcohol retail deregulation is, in fact, significantly correlated with a 7 percent increase in per capita government revenue. This estimate is robust to the inclusion of other factors that might affect trends in liquor board net income, such as the province's per capita income, unemployment rate, and level of alcohol sales. We also include separate constant terms for each province that control for province-specific, time-invariant differences.³¹ As discussed, it is not important to control for differences in commodity taxes as liquor board net per capita income reflects operating profit and does not include government

revenue from alcohol taxes. Details of this analysis are given in Appendix A.

B. Claim: Higher Prices for Beer

Some have argued that deregulation of beer sales would result in higher prices.³² This claim rests mainly on a survey commissioned by TBS and conducted by Ipsos Reid³³ of beer prices in 90 stores in Quebec, British Columbia, Alberta, and Ontario. In essence, the study extracts the province-specific commodity tax from beer prices in Quebec, British Columbia, and Alberta and replaces it with the Ontario-specific tax.

According to TBS, prices in a deregulated market with separate wholesalers and retailers would rise due to “double marginalization.” In particular, there would be a “double-markup” because new retailers would require a certain level of profits in addition to the markups already imposed by the beer manufacturers themselves. However, this is flawed logic because more competition, in fact, should constrain markups. It is quite conceivable that lower retail prices would result from the entry of new retailers attempting to acquire market share by charging lower markups.

30 Alberta's markup system is quite simple and is essentially in terms of dollars per litre conditional on product type and alcohol percentage (see above). Markups are more complicated in other provinces. In Saskatchewan, markups for spirits and wines are in terms of an ad valorem percentage rate subject to a dollar maximum, while a markup per litre is imposed on beer. (<http://www.slg.gov.sk.ca/Prebuilt/Public/Pricing%20Structure%20and%20Policy%20Manual.pdf>). In addition, products must abide with social reference pricing, which is essentially a minimum price, specific to product type and alcohol content. Further, a high alcohol content surcharge applies a flat rate per litre of pure alcohol (LPA) on all alcohol content of packaged beer greater than 6.5 percent.

31 These are called fixed effects.

32 The Beer Store study (2014) suggests that the price of a 24-pack would on average increase by \$10. Please see “Beer will cost more if sold in corner stores: Study,” by Maryam Shah, *Toronto Sun*, first posted: Sunday, February 09, 2014 09:08 PM EST and available at <http://www.torontosun.com/2014/02/09/beer-will-cost-more-if-sold-in-corner-stores-study>.

33 Ipsos Reid finds that “when prices in the other provinces are normalized to Ontario's beer tax rate to create an ‘apples to apples’ comparison, the competitiveness of Ontario's beer prices improves further: Quebec prices normalized to Ontario's tax rate are 11% – 38% more expensive than Ontario, British Columbia's prices are 42% – 48% more expensive and Alberta's prices 40% – 47% more expensive.” Available at http://www.ontariobeerfacts.ca/files/studies/ipsos_factum.pdf.

The Beer Store (2014) also suggests that prices might increase after deregulation because there would be an inefficiently larger number of retail stores, reducing average store sales and not permitting retailers to exploit economies of scale (“business stealing effect”). However, competition for market share in fact usually results in efficiencies and innovation, stimulating growth, employment, and profitability. These incentives do not exist in the current system. It is possible that the addition of new brick and mortar stores might lead to higher overhead costs and possibly higher prices. However, this would be unlikely to occur if much of the expansion occurred through existing groceries, large discount retailers, and convenience stores. More generally, if TBS’s argument were correct, we should encourage monopolies in other sectors that are no different from alcoholic beverage retailing in experiencing economies of scale – clearly not a sensible strategy.

The Evidence

Other work has found that more competition results in lower retail prices. West (2003) finds that while alcohol prices in Alberta did initially increase after privatization, they fell soon after. Hrab (2003) shows that real wholesale and retail prices have remained relatively stable in the decade following privatization. Treno et al. (2013) show that the partial privatization of liquor retail stores in British Columbia enhanced competition and access, and led to lower prices.

Rather than comparing average prices across provinces, in our view a preferable empirical strategy is to compare beer prices of specific brands sold in Ontario, which has a retail monopoly, to those for the same brands in Quebec, which has a deregulated market. We collected data on comparable domestic beer brands in Ontario and Quebec over a twenty-two week period (from December 2012 to May 2013).³⁴ We collected data on international brands over a two-week period in November 2013, then again on single day on June 30, 2014.

We focus our analysis on before-tax price differences between categories because they identify distortions due to market power. The domestic brands we study are 24-bottle (341 ml) packs of Molson Canadian, Molson Dry, Coors Light, Budweiser, Bud Light, and Rickards Red. The use of these brands is dictated by the availability of weekly price data from the websites of two large grocery retailers in Quebec (IGA and Metro), which are the source of our Quebec price data. Moreover, these brands are among the top 10 brands sold by the Beer Store. We collected data on prices of 24-bottle packs (330 ml) for three major international brands – Heineken, Corona, and Stella Artois – through on-site visits to specific Costco stores in Quebec, then subsequently collected price data from a major grocery store’s flyer.

Table 3 presents sample median beer prices of comparable domestic and international beer brands in Ontario and Quebec.³⁵ The data for Ontario are from TBS’s website and reflect all surcharges in the

34 Described in Sen (2013b, c). The Beer Store’s study suffers from a number of deficiencies. First, a more insightful calculation would account for all province-specific policies and regulations and then compare the prices with these factors netted out. Second, the survey seems to be based on single store visits over a two-week period (from April 24th to May 9th of 2013). A more acceptable methodology would be based on multiple visits to the same store over time in order to control for unobserved shocks that are store specific. Third, the source of price differences is unclear, since the study does not report prices for the same brands across provinces, but only average prices. The composition of the sales thus matters to the results.

35 We rely on sample medians given the skewness visible in beer prices for some brands. However, results based on sample means are quite comparable. Please see Sen (2013c) for further details.

Table 3: Comparing Ontario and Quebec Beer Prices

Brand	Beer Store Advertised Price (Sample Median) – includes HST & Deposit Fee (1)	Eliminating HST & Deposit Fee (2)	Eliminating Commodity Tax Difference (3)	Quebec Flyer Price (Sample Median) – Adjustment for Deposit Fee & GST/QST (4)	Difference with Commodity Tax Adjustment (5) = (3)–(4)	Ontario Price Net of Federal Commodity Tax (6)
Domestic (from December 2012 to May 2013) 24 pack				<i>IGA & Metro price</i>		
Molson Canadian	\$37.95	\$31.46	\$28.12	\$26.81	\$1.31	\$21.47
Coors Light	\$37.95	\$31.46	\$28.12	\$24.81	\$3.31	\$21.47
Budweiser	\$35.95	\$29.69	\$26.35	\$26.81	-\$0.46	\$19.70
Bud Light	\$35.95	\$29.69	\$26.35	\$24.81	\$1.54	\$19.70
Rickard's Red	\$39.95	\$32.23	\$29.89	\$26.80	\$3.09	\$23.24
Molson Dry	\$31.95	\$26.15	\$22.81	\$26.81	-\$3.99	\$16.16
International (November 2013) 24 pack				<i>Costco price</i>		
Heineken	\$46.95	\$39.42	\$36.12	\$24.99	\$11.13	\$29.69
Corona	\$44.95	\$37.65	\$34.35	\$24.99	\$9.36	\$27.92
International (June 30 th 2014) 12 pack				<i>IGA price</i>		
Heineken	\$25.50	\$20.44	\$18.79	\$15.99	\$2.80	\$15.45
Corona	\$24.95	\$19.96	\$18.31	\$15.99	\$2.32	\$15.85
Stella	\$25.95	\$20.84	\$19.19	\$15.99	\$3.20	\$14.97

Source: Price data on beer sold by The Beer Store were downloaded from <http://www.thebeerstore.ca/>, while flyer price data from IGA and Metro are available from <http://www.iga.net/en/> and <http://www.metro.ca/flyer/index.en.html#>, respectively.

form of provincial commodity taxes, deposit fees, and the Harmonized Sales Tax (HST). The Quebec data inputs are from weekly flyers, and include Quebec-specific commodity taxes, but not GST, Quebec sales tax, or deposit fees.

To ensure a fair comparison, we deduct any differences in deposit fees, sales taxes, and commodity taxes from posted TBS prices. Column (1) reports sample medians of brand-specific beer prices posted by TBS without any deductions; column (2), prices after deducting the HST of 13 percent and the deposit fee³⁶ of \$2.40 per case of 24 bottles; and column (3) then further deducts the difference in commodity taxes between Ontario and Quebec.³⁷ Column (4) consists of median prices from Quebec. The difference between columns (3) and (4) – reported in column (5) – yields the median price difference between each brand, independent of differences in commodity taxes. Finally, column (6) reports the Ontario price net of all deposits, sales taxes, and commodity taxes. This is done by subtracting commodity and federal taxes from values in (3).

Controlling for differences in commodity taxes, prices for Molson Canadian, Coors Light, Bud Light, and Rickards Red are roughly \$1.30 to \$3.30 lower in Quebec than in Ontario. The average price difference across all six of the brands is \$0.80, which is substantially less, given the presence of two negative differentials. However, there is no support here for the claim that allowing sales of groceries and convenience stores would raise beer prices.

Ontario-Quebec price differences are much more pronounced for international brands. Even after making adjustments for differences in commodity taxes, 24 packs of international brands are roughly \$9 to \$11 cheaper in Costco outlets in Quebec than they are in TBS stores in Ontario – a 33 percent to 38 percent price difference relative to net-of-tax Ontario prices.³⁸ We acknowledge that relying exclusively on Costco data for international brand prices might result in a downwardly biased estimate if discount retailers consistently price below grocery stores, possibly because of differences in cost structures.

We conducted a simple price comparison based on data downloaded from The Beer Store and IGA websites on June 30, 2014. We could not find 24-pack price data for international brands from IGA, and therefore, focused on differences in prices among 12-bottle packs. However, examining price differences for a different pack is certainly useful for sensitivity analysis. As can be seen from the table, there are still pronounced price differences for these specific brands between the two provinces, after controlling for differences in commodity taxes, ranging from (roughly) \$2 to \$3. This is equivalent to a 15 percent to 20 percent price difference (relative to Ontario prices net of all taxes, including federal and provincial).

These price differences support the argument that the TBS monopoly generates additional profits for major brewers. This suggests the potential for additional government revenue. A back-of-the-

36 The deposit fee in Ontario is 10¢ per bottle.

37 At the time of data collection commodity taxes were 91.62¢ per litre in Ontario and 50¢ per litre in Quebec. For a 24 pack 341 ml (\$330 ml) the Ontario commodity tax is \$7.50 (\$7.26). The commodity tax for a 12 pack 341 ml is \$3.75. This works out to a \$3.34 (\$3.30) per litre Ontario-Quebec commodity tax difference for a 24 pack of 341 ml (330 ml) bottles and a \$1.65 commodity tax differential for a 12 pack 341 ml. These taxes are paid by the consumer at the point of retail purchase, not the manufacturer. The LCBO imposes a markup equivalent to the beer tax on the beer that it sells. The federal tax is 31.12¢ per litre and is paid by the manufacturer. For a 24 pack 341 ml (330 ml), the federal tax is \$2.56 (\$2.47). For a 12 pack 341 ml the federal tax is \$1.24.

38 This average is computed after removing all provincial and federal taxes (values from column 6 in Table 3).

envelope calculation illustrates the amounts at issue. Consistent with trends over the past few years, let us assume a 85/15 percent break down in sales volumes between domestic and international beer brands,³⁹ and use the mean \$0.80 price differential for domestic brands and \$10.54 for international brands.⁴⁰ The mean net-of-tax Ontario price for domestic prices is \$20.29, resulting in a 3.9 percent price difference. The mean net-of-tax Ontario price for 24-pack international brands is approximately \$29.10, which implies a 36.22 percent price difference. These estimates produce a weighted average differential of $(0.85 \times 0.039) + (0.15 \times 0.3622) = 8.8$ percent. Employing data on 12-pack international brands sold by grocery stores yields an alternative estimate. We calculate the median price differential based on these specific prices to be approximately 18 percent. As the price differential for domestic brands remains unchanged, the corresponding weighted average differential is now $= (0.85 \times 0.039) + (0.15 \times 0.18) = 6$ percent.

These figures do not fully capture the profits that brewers might be earning because of TBS's quasi-monopoly status, because it does not take into account lower retailing costs in Ontario than in Quebec. We define these profits as the incremental amount earned by brewers in Ontario because of the quasi-monopoly retail status they have in Ontario relative to Quebec. As explained in Appendix B, these incremental profits can be expressed as the sum of retail price differences between the two provinces and the marginal cost advantage from which Ontario brewers benefit.

Given what we know about the prices to consumers in Ontario and Quebec, we can estimate the overall margin for brewers in Ontario by making reasonable assumptions about (i) the difference in the cost of retailing in Quebec versus Ontario; (ii) the retailing margin in Quebec; and (iii) the consumer price elasticity of demand for beer. This is detailed in Appendix B. We estimate that the existence of The Beer Store allows brewers in Ontario to earn profit margins that are 17 percentage points to 24 percentage points higher than in Quebec. The dollar amount of these incremental profits can be estimated by a rough calculation. In 2009, The Beer Store sold more than 725 million litres of beer. Using a per litre beer price⁴¹ of \$3.67 and a 24 percent incremental profit margin, estimated incremental profits are $0.24 \times 3.67 \times 725,000,000 = \$638.5$ million. A margin of 17 percent yields a figure of \$452 million.

We cannot verify the size of the profits of the brewers that own TBS because they do not publish the figures for Ontario. However, the above ball-park estimates suggest that they are substantial. These profits accrue to the brewers and not to the government of Ontario, raising the question of why the government sanctions a private monopoly without exacting any compensation for it. Deregulation of beer sales would allow some increase in government revenue through higher taxes on beer, while still bringing about a fall in beer prices. Thus consumers and taxpayers would be better off.

39 Statistics Canada data for 2010 (CANSIM Table 183-0015) reveals sales volumes for all beer to be 817,615,000 liters and the sale of domestic beer to be 694,946,000 liters. The Beer Store's sales of 725 million litres out of a total of 818 million litres reported by Statistics Canada closely correspond to the 80 percent market share revealed by LCBO (2012).

40 \$0.80 is the mean price differential across all six domestic beer brands as contained in Table 3. The mean of the differences for international brands (\$11.13, \$9.36, and \$11.13) is \$10.54.

41 Statistics Canada data for 2010 (CANSIM Table 183-0015), with price calculated by dividing value of sales by volume.

One of the additional policy questions related to the incremental profits that the brewers earn through The Beer Store is what, if anything, competition policy should say about them. As a vertically integrated co-operative, the brewers that own The Beer Store directly benefit from the incremental profits. Non-owner brewers that distribute through The Beer Store can also benefit because of a lower distribution cost than if they were selling under a competitive system, as in Quebec. In a competitive market, some of the incremental profit from lower distribution costs would go to consumers, but we do not see that in either prices or the availability of stores in Ontario compared to Quebec.

Canadian competition law has, under the well-known *Superior Propane* case, resulted in the courts having little interest in adjudicating whether it is best that cost savings accrue to consumers or producers. Under this ruling – which was for a merger decision, but could apply in the case of The Beer Store – the efficiencies that The Beer Store is able to take advantage of could justify the continuation of a cost-efficient quasi-monopoly.

However, as argued by prominent competition lawyers (such as Rosenfeld 2003) such a ruling is based on a narrow definition of economic efficiency. Indeed, the ruling may have greatly underestimated the economic cost of a lack of competition, which may far outweigh any apparent economic efficiency through reduced costs of service. Instead, a better approach to viewing the economic cost of a lack of competition would take into account a broader

set of economic benefits that would result from competition driving innovation, and not simply a static accounting of the total benefits to consumers and producers given current production methods.⁴²

RECOMMENDATIONS

The following section provides possible avenues for reform. Our recommendations differ from the BASR's recommendations in several respects. We suggest the government go further in allowing competition from private firms, increasing the possibilities for new entrants, and doing more to level the playing field so that smaller wineries and breweries can thrive. Nevertheless, to minimize disruption, we do not advocate immediately throwing open all areas to competition. A gradual change to the system seems appropriate, but it should be started now.

A. Allow Grocery and Convenience Stores to Sell Beer and Wine

As a first step, Ontario should allow grocery and corner stores to retail wine and beer. Stores should be subject to limitations on opening hours, separation from other parts of the store, enforcement of minimum age of purchasers (as with cigarette sales), and other safety and health regulations. So as not to fall afoul of NAFTA, these stores should be able to offer foreign products as well as Canadian beer and wine. The province should allow domestic wineries and breweries to supply their products directly to the retail stores

42 As Rosenfeld (2003) argues, such a response was apparent in the legislative response to *Superior Propane*, as in the (not passed) Bill C-249, which stated "... the Tribunal may, together with the factors that may be considered by the Tribunal under section 93, have regard to whether the merger or proposed merger has brought about or is likely to bring about gains in efficiency that will provide benefits to consumers, including competitive prices or product choices, and that would not likely be attained in the absence of the merger or proposed merger." See <http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Mode=1&DocId=2333212>.

without going through the LCBO or TBS – subject to AGCO regulations.

B. Open Up the Right to Operate Off-Winery Stores

The province should sell licences to operate private off-winery stores. We propose that the province allow anyone wanting to retail wine (that met the province's qualifications) to purchase licences. The right to retail wine should not be restricted to owners of a domestic winery and the LCBO. Licensees could choose to sell only domestic wine (for instance, if the licensee were a winery or a cooperative of Niagara wineries), or sell a range of domestic and imported wines. Opening up wine retailing to all applicants would get rid of the special protection afforded existing off-winery stores in the NAFTA agreement and hence level the playing field for all wineries and others wanting to sell wine. Existing off-winery stores could purchase licences if they wanted to continue in operation.

The creation of new private stores would increase competition for LCBO retail stores, but not eliminate the LCBO. The LCBO could also retain its role as the sole retailer of spirits, as is the case for government stores in some other jurisdictions.

C. Eliminate the Beer Store's Quasi-monopoly

The province should also open up the right to retail beer. The province should sell licences to those meeting certain criteria, in addition to groceries and convenience stores. As for wine, the province would determine what criteria to apply. TBS outlets would be able to continue to operate provided they individually obtained licences.

Breweries could continue to use TBS as their wholesaler or retailer, but would not be obliged to do so. Brewers could form their own cooperative, use an independent wholesaler, and/or supply their own product directly to the retail stores. Indeed, with the loss of TBS's privileged quasi-monopoly, the owners (In Bev, Molson-Coors, and Sapporo) might no longer want to merge their marketing operations in the province, and instead decide to operate independently – further increasing competition in beer wholesaling and retailing. As in the case of retail outlets, the province should license wholesalers.

D. Implementation

The recommendations made above would take time to implement. In order to avoid disruption, we do not recommend a radical "big bang" restructuring of the industry, and the province could implement the recommendations gradually. Over time, they would increase competition for the LCBO and TBS, but would not eliminate these businesses. Farther down the road the increased competition might cause organic changes in the way these firms operated, perhaps leading the government of Ontario to rethink its involvement in the sale of alcoholic beverages. However, this would not be a prerequisite for greater competition, but rather the outcome of it. Implementation of reform will raise a number of detailed issues that will need to be studied carefully.⁴³

CONCLUSIONS

As summarized in the Ontario government's own Beverage Alcohol System Review Panel, the experience in other provinces and US states

43 AGCO has also begun research on the regulatory modernization of Ontario's alcoholic beverage industry; see http://www.agco.on.ca/pdfs/en/reg_modern_ont/reg_modern_findings_report_mar_2014.pdf.

suggests that there is no single model for alcohol retailing that is unequivocally best (BASR 2005). However, almost all other jurisdictions have systems with less government control than Ontario's. We find that increasing competition in the alcohol retail sector can reduce prices for consumers without necessarily decreasing revenues for the provincial government. We recommend that the Ontario government move to a more competitive system for alcoholic beverage marketing by:

- Allowing sales of wine and beer in groceries and convenience stores;
- Further opening up beer retailing by licensing other retail outlets;
- Licensing private off-winery stores to other wineries and also to new wine retailers who would be able to sell both domestic and foreign wines.

These changes will widen the choices available to Ontario consumers, reduce prices of alcoholic beverages, improve the competitiveness of Ontario's wineries and breweries, and generate more revenue for the government, while protecting the health and safety of its citizens.

APPENDIX A

We employ a multivariate regression model in order to estimate the effects of deregulation on net income ($NINC_{it}$) earned by provincial liquor control authorities while controlling for other variables. The model takes the following form;

$$NINC_{it} = \beta_0 + \beta_1 DERE_{it} + Z_{it} + P_i + \varepsilon_{it}$$

$DERE_{it}$ is a dummy variable that takes a value of 1 if retail alcohol sales are to some extent or fully deregulated, and 0 otherwise. $DERE=1$ for Alberta and from 2003 onwards for British Columbia. $DERE=0$ for Saskatchewan and Manitoba, and from 1993 to 2002 for British Columbia.

Other factors that may be responsible for movements in $NINC$ are captured in the vector Z_{it} . Specifically, we include per capita alcohol sales (in litres), per capita gross domestic product, the unemployment rate for prime aged adults, and the consumer price index.^{44, 45} P_i represents province-specific dummies that are meant to control for the potentially confounding effects of other unobserved province-specific determinants of revenue and sales reported by liquor authorities. ε_{it} is the error term.

The model is estimated using annual data for Alberta, British Columbia, Saskatchewan, and Manitoba from 1993 to 2011, thus exploiting time-series variation across a panel of provinces. Estimates are obtained using Ordinary Least Squares (OLS) with standard errors Newey-West and White corrected for unknown heteroskedasticity and second order auto-correlation. The dependent variable and all independent variables except dummy variables are in logarithms to remove scale effects on trending variables.

OLS estimates suggest that deregulation is associated with a significant (at the 5 percent level) increase in per capita net income (profits) reported by liquor authorities.⁴⁶ Per capita alcohol consumption and per capita gross domestic product also have significant positive effects on profits. In particular, deregulation is accompanied by a 6.7 percent increase. Contrary to the critics of reform, deregulation in Alberta and British Columbia has been associated with a significantly higher transfer from liquor authorities to provincial governments, after controlling for other determinants.

44 The information used to calculate these variables are publicly available from CANSIM.

45 We do not need to control for alcohol taxes as the dependent variable is per capita income of the liquor authority net of all tax revenue transfers to federal and provincial governments.

46 When the model was estimated in levels (not reported), deregulation was also significantly positive at the 5 percent level.

Table A1: OLS Estimates of Effect of Increased Competition on Per Capita Net Income (Profit) Reported by Liquor Authorities

	Coefficients
<i>Dependent Variable – Per Capita Net Income</i>	
Deregulation	0.067 (0.026)**
Per Capita Alcohol Consumption (population aged 15 and over)	1.025 (0.294)***
Unemployment Rate (prime-aged males)	0.089 (0.049)*
Per Capita Gross Domestic Product	0.327 (0.134)**
Consumer Price Index	-0.055 (0.278)
Province Dummies	Yes
Adjusted R Squared	0.834
Observations	76

Notes: The above regression results are based on data for Alberta, British Columbia, Manitoba, and Saskatchewan from 1993–2011 and are also conditioned on province fixed effects. All variables apart from the Deregulation dummy and province fixed effects are in natural logarithms. The standard errors corrected for unknown heteroskedasticity and second order autocorrelation. Standard errors of coefficient estimates are in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels.

APPENDIX B

Estimates of the profit margins earned by the brewers can be inferred from the assumption that brewers use their market power to maximize profits and from estimates of the elasticity of the demand for individual brands of beer in Ontario. The Lerner Index (L) (Lerner 1934) relates profit margins associated with market power to firm-level price elasticities of demand as follows:

$$L = (P - MC)/P = 1/\varepsilon$$

where P is price charged, MC denotes marginal costs, and ε is absolute value of the firm-level price elasticity of demand. Therefore, profit margins can be backed out using estimates of ε . Previous studies have estimated the price elasticity of demand for individual categories of beer to be quite high, ranging from -4 to -5.⁴⁷ A price elasticity of demand estimate of -4 implies that there must be a 33 percent difference between price and marginal cost:

$$P / MC = 1/(1 - 1/\varepsilon) = 1.33$$

If the elasticity is -5, then the corresponding value is 1.25.

Denote P_{ON} and MC_{ON} as the price and marginal cost of doing business for major brewers in Ontario. The difference between price and marginal cost can be decomposed as;

$$P_{ON} / MC_{ON} = (P_{ON} / P_Q) * (P_Q / MC_Q) * (MC_Q / MC_{ON})$$

Where a Q subscript denotes Quebec. The expression can be rewritten using natural logarithms as

$$\ln(P_{ON} / MC_{ON}) = \ln(P_{ON} / P_Q) + \ln(P_Q / MC_Q) + \ln(MC_Q / MC_{ON})$$

Taking the natural logarithms of ratios approximates percentage differences. Hence, the overall margin for brewers in Ontario is roughly the sum of the percentage difference between Ontario and Quebec prices $\ln(P_{ON} / P_Q)$, the percentage difference between the Quebec price and Quebec marginal cost $\ln(P_Q / MC_Q)$, and the percentage difference between the Quebec cost and Ontario cost $\ln(MC_Q / MC_{ON})$.

We are interested in the incremental profit margin on beer in Ontario versus that in Quebec. Incremental profits are defined as the difference between what major brewers earn in relative profits in Ontario (retail quasi-monopoly) and what they earn in Quebec (more competitive retail distribution). From the above equation, this is equal to $\ln(P_{ON} / MC_{ON}) - \ln(P_Q / MC_Q)$, which can be rewritten as

$$\ln(P_{ON} / MC_{ON}) - \ln(P_Q / MC_Q) = \ln(P_{ON} / P_Q) + \ln(MC_Q / MC_{ON})$$

47 Pinkse and Slade (2004) find an average brand own-price elasticity of -4.6, while Hausman et al. (1994) obtain an average own-price brand elasticity of -5.

Table A2: Incremental Profit Estimate, Price Differences, and Cost Advantage in Ontario Relative to Quebec

Assumption Regarding		Profit margins of Quebec retailers					
		<i>High (9 percent)</i>			<i>Low (7 percent)</i>		
		Incremental profit (average)	Price difference	Cost advantage	Incremental profit (average)	Price difference	Cost advantage
Price elasticity of demand for beer:	<i>High (-5)</i>	17 percent	6-9 percent	7-10 percent	19 percent	6-9 percent	9-12 percent
	<i>Low (-4)</i>	22 percent	6-9 percent	12-17 percent	24 percent	6-9 percent	14-19 percent

Simply put, incremental profits earned by major brewers in Ontario can be expressed as the sum of relative retail price differences between the two provinces and relative differences in marginal cost. While we do not have direct evidence of the profit margins of Quebec retailers in selling beer, we do have data on their overall profit margins, which are quite thin. The largest retail chains have profit margins of 7-9 percent, as calculated by Moody's.⁴⁸ Using this range of estimates for $\ln(P_Q / MC_Q)$ produces incremental profit margins in favour of Ontario of 22-24 percent assuming an elasticity of demand of -4, and 17-19 percent assuming an elasticity of -5 (see Table A-2).

We can then use these figures to calculate differences in relative marginal costs between Ontario and Quebec. Using our estimate that the price of beer is 6-9 percent higher in Ontario than in Quebec, this suggests that marginal costs of beer distribution in Quebec are higher by 12-17 percent assuming an elasticity of demand of -4, and 7-12 percent with an elasticity of -5.

48 Quoted by CBC News, <http://www.cbc.ca/news/business/moody-s-likes-the-outlook-for-canadian-supermarkets-1.1321399>.

REFERENCES

- BASR. 2005. "A Strategy for Transforming Ontario's Beverage Alcohol System. A Report of the Beverage Alcohol System Review Panel," July. <http://www.fin.gov.on.ca/en/consultations/basr/report.html>
- Church, Jeffrey R., and Roger Ware. 2000. *Industrial Organization: A Strategic Approach*. New York: McGraw-Hill. Available at: http://works.bepress.com/jeffrey_church/23.
- Hausman, J., G. Leonard, and D. Zona. 1994. "Competitive analysis with differentiated products." *Annales d'Econometrie et de Statistique*, 34: 159–180.
- Hrab, Roy. 2003. "Privatization: Experience and Prospects." Available at <http://www.law-lib.utoronto.ca/investing/reports/rp22.pdf>
- LCBO. 2012. *Responsible Growth: LCBO Annual Report 2011–12*, Toronto, Ontario. Available at http://www.lcbo.com/content/dam/lcbo/corporate-pages/about/pdf/2011_2012.pdf
- LIQ. 2013. *2013 Annual Report*, Liquor Stores N.A. Ltd., Edmonton, Alberta. Available at <http://www.liquorstoresgp.ca/Portals/5/documents/Investor%20Information/Other%20Information/AR%20LiquorStores%202013%20AR.pdf>
- MacIntyre, Hugh. 2012. "The results of beer regulation in Ontario." *Fraser Institute Canadian Student Review*. Winter.
- Menzies, David. 2002. "Booze binge: a taxpayer-funded spending spree on palatial new liquor stores raises questions about Ontario's priorities." *Canadian Business*, 75 (11): 85–88.
- Milke, Mark. 2012. "Why Ontario should privatize its liquor stores." Available at <http://www.fraserinstitute.org/research-news/news/commentaries/Why-Ontario-should-privatize-its-liquor-stores/>
- Morris, Rob. 2013. *Economic Impact of Canadian Wine and Grapes – 2011*, San Francisco: Frank, Rimerman and Company. March.
- Mysicka, Robert, and Marty McKendry. 2013. *Beer, Butter, and Barristers: How Canadian Governments Put Cartels before Consumers*. Commentary 382. Toronto: C.D. Howe Institute. Available at http://www.cdhowe.org/pdf/Commentary_382.pdf
- NAS. 2007. *Reducing Alcohol-Related Harm in Canada: Recommendations for a National Alcohol Strategy*. National Alcohol Strategy Working Group. April. Available at <http://www.ccsa.ca/Resource%20Library/ccsa-023876-2007.pdf>
- Ontario. 2003. *Starting a Winery in Ontario*, Ministry of Agriculture and Food. Toronto: Queen's Printer for Ontario.
- Pinkse, Joris, and Margaret Slade. 2004. "Mergers, brand competition, and the price of a pint." *European Economic Review*, 48: 617 – 643.
- Rosenfeld, William. 2003. "Superior Propane: the case that broke the law." *Global Competition Review* 6 (9) October. Available online at: <http://www.goodmans.ca/docs/SuperiorPropane.pdf>
- Sen, Anindya. 2013a. "An Economic Analysis of Increasing Competition in Retail Liquor Sales in Ontario." Available at <http://saintjohnswort.ca/wp-content/uploads/2013/12/Economic-Analysis-of-Retail-Liquor-Sales-in-Ontario-Part-I-June-24-2013.pdf>
- . 2013b. "An Empirical Analysis of Beer Price Differentials between Ontario and Quebec." Available at <http://www.c-storecanada.com/attachments/article/96/An%20Empirical%20Analysis%20of%20Beer%20Price%20Differentials%20Between%20Ontario%20and%20Quebe-.pdf>
- . 2013c. "The Beer Store, Monopoly Profits and the Potential for Government Revenue: An Economic Analysis." Available at https://uwaterloo.ca/economics/sites/ca.economics/files/uploads/files/the_beer_store_monopoly_profits_and_the_potential_for_government_revenue.pdf

The Beer Store. 2013. "Building Towards the Future, The Beer Store 2011-2012 Operations Report."

Available at http://www.thebeerstore.ca/sites/default/files/untitled%20folder/TBS%202011-2012_OpsReport_vfinal_webversion.pdf

———. 2014a. "Alcohol Retailing Deregulation: Implications for Ontario." Available at http://www.thebeerstore.ca/sites/default/files/pdfs/TBS_AlcoholDeregulation.pdf

———. 2014b. "About Us," <http://www.thebeerstore.ca/about-us>

West, Douglas. 2003. "The Privatization of Liquor Retailing in Alberta." The Fraser Institute, available online at <http://oldfraser.lexi.net/publications/pps/5/>

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